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RAW SEQUENCE LISTING

DATE: 05/16/2003

PATENT APPLICATION: US/10/048,071

TIME: 09:31:24

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3 <110> APPLICANT: O'Donnell, Michael E.
 4 Bruck, Irina
 5 Zhang, Dan
 6 Whipple, Richard
 8 <120> TITLE OF INVENTION: DNA REPLICATION PROTEINS OF GRAM POSITIVE BACTERIA AND
 9 THEIR USE TO SCREEN FOR CHEMICAL INHIBITORS
 11 <130> FILE REFERENCE: 22221/1023
 13 <140> CURRENT APPLICATION NUMBER: 10/048,071
 C--> 14 <141> CURRENT FILING DATE: 2002-10-23
 16 <150> PRIOR APPLICATION NUMBER: 60/146,178
 17 <151> PRIOR FILING DATE: 1999-07-29
 19 <160> NUMBER OF SEQ ID NOS: 84
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87 <212> TYPE: PRT

88 <213> ORGANISM: Staphylococcus aureus

90 <400> SEQUENCE: 2

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97 Asp Ala Leu Ala Ile Thr Asp Thr Asn Val Leu Tyr Gly Phe Pro Lys
98           35           40           45
100 Phe Tyr Asp Ala Cys Ile Ala Asn Asn Ile Lys Pro Ile Phe Gly Met
101           50           55           60
103 Thr Ile Tyr Val Thr Asn Gly Leu Asn Thr Val Glu Thr Val Val Leu
104           65           70           75           80
106 Ala Lys Asn Asn Asp Gly Leu Lys Asp Leu Tyr Gln Leu Ser Ser Glu
107           85           90           95
109 Ile Lys Met Asn Ala Leu Glu His Val Ser Phe Glu Leu Leu Lys Arg
110           100          105          110
112 Phe Ser Asn Asn Met Ile Ile Ile Phe Lys Lys Val Gly Asp Gln His

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119 145          150          155          160
121 Val Cys Tyr Gln Thr Arg Gln Asp Ala Asp Thr Ile Ser Ala Leu Ala
122          165          170          175
124 Ala Ile Arg Asp Asn Thr Lys Leu Asp Leu Ile His Asp Gln Glu Asp
125          180          185          190
127 Phe Gly Ala His Phe Leu Thr Glu Lys Glu Ile Asn Gln Leu Asp Ile
128          195          200          205
130 Asn Gln Glu Tyr Leu Thr Gln Val Asp Val Ile Ala Gln Lys Cys Asp
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151 Gly Ile Thr Thr Ile Asp Pro Ile Lys Phe Asn Leu Leu Phe Glu Arg
152          325          330          335
154 Phe Leu Asn Pro Glu Arg Val Thr Met Pro Asp Ile Asp Ile Asp Phe
155          340          345          350
157 Glu Asp Thr Arg Arg Glu Arg Val Ile Gln Tyr Val Gln Glu Lys Tyr
158          355          360          365
160 Gly Glu Leu His Val Ser Gly Ile Val Thr Phe Gly His Leu Leu Ala
161      370          375          380
163 Arg Ala Val Ala Arg Asp Val Gly Arg Ile Met Gly Phe Asp Glu Val
164 385          390          395          400
166 Thr Leu Asn Glu Ile Ser Ser Leu Ile Pro His Lys Leu Gly Ile Thr
167          405          410          415
169 Leu Asp Glu Ala Tyr Gln Ile Asp Asp Phe Lys Glu Phe Val His Arg
170          420          425          430
172 Asn His Arg His Glu Arg Trp Phe Ser Ile Cys Lys Lys Leu Glu Gly
173          435          440          445
175 Leu Pro Arg His Thr Ser Thr His Ala Ala Gly Ile Ile Ile Asn Asp
176      450          455          460
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179 465          470          475          480
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182          485          490          495
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194 545      550      555      560
196 Lys Leu Lys Pro Glu His Phe Glu Asp Ile Val Ala Val Thr Ser Leu
197      565      570      575
199 Tyr Arg Pro Gly Pro Met Glu Glu Ile Pro Thr Tyr Ile Thr Arg Arg
200      580      585      590
202 His Asp Pro Ser Lys Val Gln Tyr Leu His Pro His Leu Glu Pro Ile
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205 Leu Lys Asn Thr Tyr Gly Val Ile Ile Tyr Gln Glu Gln Ile Met Gln
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208 Ile Ala Ser Thr Phe Ala Asn Phe Ser Tyr Gly Glu Ala Asp Ile Leu
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211 Arg Arg Ala Met Ser Lys Lys Asn Arg Ala Val Leu Glu Ser Glu Arg
212      645      650      655
214 Gln His Phe Ile Glu Gly Ala Lys Gln Asn Gly Tyr His Glu Asp Ile
215      660      665      670
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218      675      680      685
220 Pro Arg Ala His Ala Val Ser Tyr Ser Lys Ile Ala Tyr Ile Met Ser
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223 Phe Leu Lys Val His Tyr Pro Asn Tyr Phe Tyr Ala Asn Ile Leu Ser
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238 Tyr Gln Asn Gly Lys Phe Lys Asp Phe Phe Asp Phe Ala Arg Arg Ile
239 785      790      795      800
241 Pro Lys Arg Val Lys Thr Arg Lys Leu Leu Glu Ala Leu Ile Leu Val
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244 Gly Ala Phe Asp Ala Phe Gly Lys Thr Arg Ser Thr Leu Leu Gln Ala
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247 Ile Asp Gln Val Leu Asp Gly Asp Leu Asn Ile Glu Gln Asp Gly Phe
248      835      840      845
250 Leu Phe Asp Ile Leu Thr Pro Lys Gln Met Tyr Glu Asp Lys Glu Glu
251      850      855      860
253 Leu Pro Asp Ala Leu Ile Ser Gln Tyr Glu Lys Glu Tyr Leu Gly Phe
254 865      870      875      880
256 Tyr Val Ser Gln His Pro Val Asp Lys Lys Phe Val Ala Lys Gln Tyr
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268 Ile Phe Pro Asn Gln Phe Lys Lys Tyr Glu Glu Leu Leu Ser His Asn
269 945          950          955          960
271 Asp Leu Phe Ile Val Ser Gly Lys Phe Asp His Arg Lys Gln Gln Arg
272          965          970          975
274 Gln Leu Ile Ile Asn Glu Ile Gln Thr Leu Ala Thr Phe Glu Glu Gln
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277 Lys Leu Ala Phe Ala Lys Gln Ile Ile Arg Asn Lys Ser Gln Ile
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